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Thesis

THE JUNIOR COLLEGE IN MASSACHUSETTS

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THE JUNIOR COLLEGE IN MASSACHUSETTS

Brief

I. The statement of the question to be discussed,
(A) The need of the junior college in Massachusetts.

II. The meaning of the junior college varies in the different sections of the country.
(A) In Michigan and Illinois the term refers to the first two years of college work, whether offered at the college or in connection with a high school.
(B) In Missouri, the small private college has co-ordinated its work with that of the state university.
(C) Very often the normal schools have offered considerable academic work.
(D) California, to eliminate the large number of students in the first two years of the universities, developed a system of junior colleges in connection with their high schools.

III. The present aim of the movement is
(A) The adjustment of the school system to the normal development of the pupils.
1. The first two years of college work are really secondary in nature.
2. Period of adolescence closes near the end of the sophomore year.
(B) The adjustment of the schools to civic demands by offering:
1. Pre-college courses,
2. Vocational and
3. Civic training.

IV. The returns from a series of questionnaires show that
(A) The university men strongly endorse the movement, and
(B) The high school men find that the junior college is justifying itself.

V. A comparison of educational statistics shows that:
(A) Massachusetts pupils pay 3 and 5 times as much for their college education as is necessary in some of the western states, and
(B) Courses offered here are not as varied nor do they contain the utilitarian material offered in the other states, also
(C) Massachusetts, although the home of a large number of private colleges, offers the least amount of public education beyond the high school of any state in the union.

VI. The sources from which the junior college may grow in this state are:

(A) Post-graduate work offered in the larger high schools,

(B) The demand of the normal schools to prepare high school teachers,

(C) The increase in the growth of vocational education, and

(D) The favorable attitude of the school men who are familiar with the movement.

VII. The establishment of junior colleges in Massachusetts, will

(A) Send more thinkers to the college and universities,

(B) Tend to advanced and professional work,

(C) Benefit the high school,

(D) Offer wider opportunity to the pupil, and

(E) Develop a high type of American citizen.

THE JUNIOR COLLEGE IN MASSACHUSETTS

Margaret Slattery interprets true democracy as meaning equal opportunity for every boy and girl. The people of the United States, and perhaps especially those of Massachusetts, pride themselves on the approximate fulfillment of that ideal in the educational sphere. They point with pride to their public schools, elementary, secondary and normal, to the numerous colleges and universities, and feel that a full measure of educational opportunity is being given. But is Massachusetts offering to her young people the same or equivalent opportunities as other parts of our country?

There was a time when this state held the leadership of educational affairs, but judging by the returns received from a series of questionnaires, a large number of the school men of the state are unfamiliar with a movement which has held the attention of the west for several years and is pronounced by men acquainted with it, as permanent and essential to a well co-ordinated school system. The Junior College seems to have become securely established in several of the western states; it, therefore, behooves Massachusetts to study this institution and decide whether it is to have a place in her educational system or not.

What is a Junior College? The definition varies somewhat in the different sections of the country. The University of Michigan, in 1883, divided its work into two distinct parts, that which covered the first year and a half or two years, and that which completed the four year course. The latter part was specialized, the first part of general educational value. This is, I think, the first official recog-

nition of the distinction between the work of the first two and last two college years.

In 1892, the University of Chicago, under the leadership of its president, William Rainey Harper, divided its course into the "Academic College", made up of the freshman and sophomore years, and the "University College", which included the junior and senior years. Four years later these titles were changed to "junior" and "senior" college, respectively. This distinction has been adopted by many of the leading colleges and universities of the country. At Dr. Harper's suggestion a junior college department was founded in 1902, at the Joliet High School, the first junior college to be established.

Another phase may be found in Missouri and her neighboring states. Here the junior college is the outgrowth of the private school which offered work in advance of the secondary school, but not of college rank. A large number of these private "Colleges" had sprung up in Missouri and found themselves unable to do work of real collegiate grade. They lacked funds; they were deficient in equipment; and the number of students on their rolls was steadily decreasing. The State University came to their aid by making this offer: they were to shorten their course to two years, make it such that it would be the equivalent of the regular freshman and sophomore years at the University and be open for University inspection. In return the University would accept their graduates into full standing in the junior year. As a result of this arrangement, the small colleges have doubled their enrollment, received larger endowments, and under their new name, Junior Colleges, are doing work that is equivalent to the first two years of regular university training.

At the same time, the University has suffered no loss in numbers; on the contrary, it has grown more rapidly than before.

The state normal school must be included in our list of schools that may properly claim the rank of junior college. There is an increasing demand on the universities to grant the graduates of a normal school full or part credit for their two years' work. This demand has been granted in several states and consequently many normal schools are offering some purely academic work leading directly to the junior year of the university.

California has given the term, junior college, a newer interpretation. That state found itself confronted by a peculiar problem, due partly to its shape and size, and partly to the rapid increase in population. It had already established two state universities, one in the southern, the other in the northern part of the state. But these schools, together, were unable to accommodate the rapidly growing student body. This condition, with the belief that the first two years of college work were, fundamentally secondary in nature, led through various steps to the passing of an act by the legislature in 1907, enabling high-school districts to add two years to the traditional four-year course. There are now more than twenty such extensions proving to the promoters of the movement, in California at least, that not only is the junior college to be a permanent part of their educational system, but also proving that it will only temporarily reduce the numbers at the state universities. The enrollment of the third and fourth years is increasing at a rate which will soon overbalance the decrease in the first two years.

The present aim of the junior college movement, as it has developed from these various sources, has become two-fold: first, the adjustment of the school system to the normal development of the pupil; second, the adjustment of the school to civic demands.

Walter S. Athearn, in his "Religious Education and American Democracy", states that "over thirty per cent. of a college course is of high school grade". A large part of the work offered to freshmen and sophomores is a repetition of work which is offered in the high school, but which many pupils are unable to take through lack of time. These subjects, similar in content to high school courses, are also taught more effectively by secondary methods and in small class groups. It is almost impossible to keep the classes small with the first or second year enrollment usually found in most of our colleges. Classes of elementary French, for example, often contain over forty pupils, while first and second year English classes run up into the hundreds. Satisfactory results cannot be obtained under such conditions.

But aside from the question of numbers and needless repetition of subject matter, the method of instruction assumes first importance. Altogether too often the elementary classes are given to either an untrained assistant or to a professor whose time and energy is largely devoted, and rightly so, to more advanced work. Such subjects are far better handled by teachers who are not only well prepared in the subject matter, but who are already acquainted with the pupil and his possibilities. Moreover, better work is done in classes which stand at the head of their school and which are small enough to allow individual work.

High school graduation, at present, marks no real point in the student's life, whereas such is distinctly evident toward the end of the sophomore year in college. The period of adolescence is considered, by many physicians, to extend from the ages of eleven or twelve years to nineteen or twenty. School systems are gradually being adjusted at the lower end so that periods of school shall correspond to stages in the child's development. The junior high school is an accepted institution. It is no less important that the end of the period be as carefully co-ordinated with their school work as the beginning.

The adolescent period is the time during which the foundations of knowledge and character can be most amply and securely laid. Parents who hesitate in placing upon their sons and daughters, at this age, the responsibility of self direction that goes with the greater freedom of university life, find in the junior college an opportunity for beginning a higher education with less responsibility. In this way influences of the home life, church, and social group are retained for two years longer. The readjustment, coincident with beginning life at a university--which is considerable of a shock, and whose reaction is often far reaching and disastrous in its effects--is postponed to a time when the pupil can withstand it. Likewise their school work is carried on under conditions which bring the teacher into close personal touch with her pupils and she may be a vital factor in the upbuilding of each pupil's personality and character.

The junior college will make for an adjustment of our school system which will bring together all work of secondary nature, apply methods of teaching that are adaptable to the pupil, and keep the boy and girl nearer home where they may be more carefully trained.

A careful training includes not only the customary academic courses, but also instruction leading to a higher type of American citizenship. "The perpetuity of our American democracy demands a very high level of intelligence on the part of the masses. We are extending the franchise, giving our people the rights of initiative, recall, referendum, and permitting the people to vote directly on many important problems of government. Just in proportion as we hand over to the people responsibilities of citizenship does it become necessary to give to the people increased opportunity for education. The perpetuity of the state demands an educated citizenship". W. S. Athearn.

Alexis F. Lange, of the University of California, holds that a public school system must work from the view point of the common good of American democracy. "The fundamental idea of which must be that, a school system is an organ of the body politic, bone of its bone, flesh of its flesh, an organ devised for each and all, from generation to generation. Its structure must be shaped so that, as time goes on, more and more adequate recognition may be given to the educational rights of the minority and majority of child-citizens. Provision may be made, not only for length and continuity, but also for breadth and completeness, of educational opportunities. It builds for capacity for further and continuous development, for peaceful adaptations to new occasions and the new duties they teach. To have it function thus presupposes such correlation of parts as to reduce the danger of functional troubles to a minimum. It follows from this, that the school phases of social evolution can be adequately dealt with only by a statecraft that combines farsight and foresight with evolutional thought and

practice. We want neither the conservatism of Lot's wife, the original "standpatter", nor radicalism devoid of historic sense. What is wanted is teleological opportunism which has ample room for temperamental differences as to speed.

"The etymological meaning of the term pedagogue needs to be Americanized into that of leading citizen, with the connotation that such a one is aggressively alive to the inherent purpose of democracy: to form a more perfect union of educational effort; to establish peace as to educational institutions; to provide for the common defense against all enemies of the child-citizen; to promote the general welfare, not by perverting young Americans into textbooks, papery inside and leathery outside, but to advance them by means of school subjects and school life in preparedness as to personal freedom and loyal co-operative service".

If the junior college is to fulfill these ideals, and is to be supported by the taxation of all, either of the local community or the state, then it must be broad enough in scope to offer something readily desirable by all and not limited to a few selected classes. There must be some service which the local junior college can perform for the boys and girls and the community better than it can be performed by the more remote institutions.

It is important that high standards be maintained, even at the expense of some popularity. The academic work done must be of advanced grade and easily equal that offered at the universities and colleges. But it is also important to remember that the junior college exists, not only because some of its students will continue their work at some

senior college, but because most of its graduates will presumably not do so. Many will not be able to study further because of the lack of sufficient funds. In these days, when dollars are worth so little in purchasing power, and so many are needed to provide the necessities of home life, it is impossible for many families to find enough extra ones to send a boy or girl away to college; but if the expense is shared, it makes it possible for these young people to obtain at least two years of advanced training. Not only does the money-saving plan appeal to the students and their parents, but to the authorities as well.

Mr. G. B. Jeffers, of the Teachers' Training School at Schenectady, New York, outlines this condition. "About two hundred forty pupils graduate from our high school annually. Of this number about eighty per cent. go away to school for two or four years. If there were a junior college to which they could go for two years, and granting that one hundred of them took advantage of the opportunity, which would be about forty per cent., let us see what amount of money would remain in the town which otherwise goes out of it. Perhaps seven hundred dollars is not too much to allow for one year in college per pupil. Since the junior college gives the work for the first two years, we would need to multiply by two, giving a saving of fourteen hundred dollars per pupil. For one hundred pupils we would have one hundred forty thousand dollars saved to the town annually. This ought to appeal to those authorities who control school and money affairs".

While it will reduce the cost of a university or college education, it will also provide "finishing" vocational and civic courses. There has been a growing tendency to introduce vocational work into the

schools, some educators advocating that such work begin in the primary grades. The larger number agree, however, that vocational training is most effective when laid on a good foundation of general academic training. A mental bias should not be established too early, else the mind becomes narrow and stunted. Boys and girls must be presented to the business world ready to find their places in it and fill it. It is an essential part of the junior college idea that each junior college have its own individuality, dependent upon its environment. Thoughtless duplicating should be out of the question. Hence the nature and scope of the vocational department must be determined primarily by the communities served most directly, providing against the danger of isolated, exclusive specialization, which would be its own undoing.

Among the most popular courses offered in this department, in the different schools, are agriculture, industries, commerce, applied civics, shop and domestic science. Hibbing Junior College, Minnesota, offers two years of electrical engineering and technology. Detroit, Michigan gives an advanced course in accounting, typewriting and stenography, and an extensive and intensive musical training. Their main groups are: literary; business administration; pre-medicine, law and engineering. Graceland College at Lamoni, Iowa, adds to the usual courses one in wireless telegraphy.

Even more important than vocational training is the training for the vocation of citizenship, "citizenship being conceived of as an applied science. In an intelligent way the pupils should gain knowledge of social life, acquire a sense of oneness with their fellows and a strong consciousness of the common good, and form habits that

characterize good citizenship of a high level." This should be the controlling purpose of the school. It may be accomplished partly thru courses in history and political science, applied civics and the like, but largely thru the combined efforts of all in forming the proper school attitude and spirit.

In order to become familiar with the opinions of numerous educators, both in Massachusetts and elsewhere, a set of questionnaires was sent out. A diagrammatic summary of the returns will be found appended. Of one hundred fifty letters sent, one hundred were returned. In these, however, many questions were left unanswered, and in several cases, the entire set.

In general, the attitude of the replies is one of approval. Only one college and three high schools registered their disapproval. Charles H. Judd, of the University of Chicago, writes that the junior college seems to them to be a vigorous, wholesome and altogether desirable movement; that if it is properly worked out, he has no doubt at all but that it will help to organize the educational system more compactly than it is now organized. The University of Michigan is most emphatic in its ratification, agreeing with others that the junior college is only the natural growth of our present system; that while the development may be slow, it will be sure, since it is based on psychological, educational, and administrative principles which are sound.

There were several who qualified their support by insisting that the school be established only in places where the high school is well attended and the taxable property of the community large enough to support such an institution. Such limitation, of course, is necessary,

just as it is with any other undertaking. The enrollment for the advanced classes must be assured; the support of the school guaranteed; the quality of the instructors must be high; and the elementary, grammar and high schools must not suffer in any way. No organization can long survive which derives its sustenance in a parasitic manner. It must prove its worth thru service to the group which supports it, and by its effect upon the system into which it is introduced.

In the states where it has been most widely adopted, public opinion supports it. California, Michigan, Missouri, Minnesota, and Illinois all feel that the junior colleges are justifying their existence by their own work and their influence upon the high school and the community. They have stimulated an interest in higher education which had not before been so closely brought home to the minds of many young people and their parents. They have raised the intellectual standard of the community and in so doing have been strengthening and inspiring the high school. Students in a high school which has a junior college connected with it, must necessarily think more of the possibility of collegiate training and of finding an appropriate place in the social and business world. The teachers involuntarily acquire a more scholarly attitude toward their own work and that which they demand of their pupils. Under this influence a much larger per cent. of the boys and girls round out a secondary education, and more complete college work than under the old regime.

The criticism has been offered that keeping pupils under the restricted influence of local conditions will result in their entering the third year of a regular four year college or university at a great

disadvantage, that they will be too immature and inexperienced to mix well with classes who have already had two years away from home. But quite to the contrary, university men say that they are indistinguishable from their own students. While the University of California is quoted as having made the statement that the junior college students were better prepared than the average junior.

This, then, is the condition in some of the other states, principally in those which have state universities. There has been some talk of a state supported university for Massachusetts but it has been deemed unadvisable on account of the large number of splendid private colleges. The question may be raised whether these schools offer to the young people of this state opportunities equal to those offered to boys and girls of other states. It is true that no matter where one lives in Massachusetts, one is not far from a first-class college, and that, therefore, the students need not go far from home. This is an advantage, but it is partly counteracted by the rates of tuition. The average yearly tuition of sixteen of our colleges is about one hundred fifty dollars. This, compared with forty-seven dollars at the University of Michigan and thirty dollars in Wisconsin, schools which are typical of their kind, shows that our young people are having to pay three and five times as much as those who live in Michigan and Wisconsin. A comparison of the catalogues from the various schools indicates that the curriculum here is no richer than that offered by these other schools. On the contrary the western schools offer a greater variety of subject matter, including a large amount of utilitarian material.

The statistics given in the report of the Commissioner of Education for 1917 show that Massachusetts compares very favorably with the other states of the Union when the per cent. of the population found in the secondary schools and higher institutions is computed. However, if the number of pupils in high schools be compared with that in the universities and colleges, this state will not rank much above the average and will be considerably below many of the other states. Also, Massachusetts will take next to the lowest place on the list when the comparison is based on the amount of public instruction given to advanced students. Fifty nine hundredths per cent. of the population of the state will be found in the higher institution, but only approximately four per cent. of these students are being educated at public expense. This means that less than three hundredths of one per cent. of the population in Massachusetts is receiving advanced training from the hands of the Commonwealth. In Wisconsin twenty two hundredths, and in Michigan twenty eight hundredths of one per cent. are the corresponding figures. In addition to this a study of catalogues showed that of 16,032 pupils in sixteen of our most prominent colleges only forty-five per cent. were from this state, while nearly seventy per cent. of the enrollment at Wisconsin, and seventy-eight per cent. at Michigan, come from their home state. By combining these figures, it is found that sixteen hundredths per cent. of the population of Wisconsin, and twenty two hundredths per cent. of the population of Michigan find their way into the State University alone; while only one and one half hundredths per cent. of the people of Massachusetts are found in state supported colleges, (including those who hold state scholarships at

Massachusetts Institute of Technology and Worcester Polytechnical Institute.) This is neither just nor democratic. Every year demands better equipment and higher efficiency of its young people, and equal opportunity for advanced training must be offered to all, not a small portion, of the growing body of citizens.

There are, at present, three sources from which the junior college movement may well be expected to develop in our state. Nor are these elements different from those in the other parts of the country where it is already well established. In several of the larger high schools, such as Everett, Newton and Worcester Classic, five to eight per cent. of the graduating class return to take post-graduate work. At present this means that they study subjects which they did not have time to include in the regular four years; but it does not include advanced training, nor work of a higher type as it would if a junior college were established. Springfield is trying the experiment and is greatly pleased with the response from both pupils and parents, and with the quality of work done. The Junior College feels that it is rendering a service to the community which neither the high school nor college can do. At North Lancaster there is a so called Junior College, and Laselle, Mount Ida and other schools offer work of a similar character. Schools of this type will soon be demanding that the colleges recognise their work.

The normal schools are asking to be allowed to add two years to their regular course. They wish to be able to train high school teachers as well as elementary and grammar school teachers. The atmosphere of a normal school, while it develops a consecration to the cause of

teaching, if prolonged over too long a time is narrowing. The secondary teacher needs college experience and training. Boston University will accredit normal school graduates with two years' work and allow them to enter the junior year of the College of Education, thus recognizing that some normal school work is advantageous to high school teachers.

Lastly, the rapid increase in the growth of vocational education is over-crowding our high school curriculum. There is no question but that vocational guidance and training are essential to a public system of education. However, it must not be forgotten that vocational training without a firm basis of general education has not proved satisfactory, nor is it right to urge a child to choose his life-work before he is old enough to have some judgment on the matter. Therefore it finds its natural place in the junior college.

It has already been noted that a large number of the questionnaires sent out into Massachusetts were returned unanswered, because of lack of familiarity with the subject. Yet of the returns received from eighteen high schools, thirteen were strongly in favor of the movement, and every college, save one, sent back a favorable report. Under these conditions it seems very probable that the junior college movement will continue to grow and find stanch supporters in this state.

The establishment of junior colleges in connection with our largest high schools would serve many ends. It will send more thinkers to the colleges and universities, it will tend more and more to advanced and professional work and will aid the professional schools to require two years of arts work. The high school will feel the unconscious stimulus

of the junior college, just as undergraduate work benefits by a good graduate school. A large number of pupils will be able to do advanced work who otherwise would be forced into the business or commercial world largely unprepared. There will be no whirl of social life continually playing about the student to detract from his work, such as he would find in the larger institutions. And the commonwealth will receive a larger number of trained American citizens into its ranks, men and women who have chosen their sphere of industrial activity wisely, who are trained to meet the demands of their citizenship, and who have taken as their standards, the highest ideals of American democracy.

Summary of returns received from questionnaires sent to

I. Junior Colleges and Normal Schools *

	School	A. What concrete services are the junior colleges rendering their communities?	B. What per cent of pupils continue work in regular colleges?
1.	Arkansas Cresent College Eureka Springs.	Girls who would stop at high school graduation obtain two years of college work.	50 %
2.	California Fresno Junior College	a. Makes possible immediate continuance of student's education. b. Gives chance to cultivate both strength of scholarship and character before moving to a new environment. c. Allows part time service. d. Strengthening influence on the high school. e. Increased library and laboratory equipment.	over 80 %
3.	Sacramento Junior College	a. Giving college education to boys and girls who cannot leave home. b. Giving college courses to adults who may attend one or more courses.	50%
4.	Santa Barbara Junior College		75%
5.	Crane Jun. College Chicago, Ill.	a. Two years of college work at home at nearly no expense. b. Relieves congestion at State University.	75%
6.	Graceland College Lamoni, Iowa	Conducts community lyceum course.	75%

* Grouped alphabetically by states.

	School	A. What concrete services are the junior colleges rendering their communities?	B. What per cent of pupils continue work in regular colleges?
7.	Holton Junior College Holton, Kan.	Retention in school of boys and girls who otherwise would never start a college education.	50%
8.	Hamilton College for Women, Lexington, Ky.	Possible for young women to receive first two years of college under home protection and guardianship.	Between 60 and 70%
9.	Farmington State Normal Maine		50%
10	Normal Art Boston		
11	Springfield Junior College Mass.	Helps to train leaders of community by offering advanced work to those who could not afford it otherwise	30%
12	Detroit Junior College Michigan.	a. Large increase in number who go to college. b. Saving to pupils who live at home. c. Culture of intellectual interests.	90%
13	Grand Rapids Junior College, Mich.	Furnishes better instruction than underclassmen usually receive.	
14	Hibbing Junior College Minnesota.	Vocational training	Larger part of enrollment.

	School	A. What concrete services are the junior college rendering their communities?	B. What per cent of pupils continue work in regular colleges?
15	Rochester Junior College Minnesota	Enables young people of moderate means to secure college education. Young people may live at home.	90%
16	Winona State College Minnesota	Offering college work at lower rate than the university can offer it.	66%
17	Lindwood College, St. Charles, Mo.	Training young women to lead "useful" lives and take a place in the world.	50%
18	Louisburg College N. Car.	Service is state wide and embraces all the values of real education.	20%
19	Teachers' Training School, Schenectady, New York.		
20	Hiwasee College, Tenn.		75%
21	Clarendon College, Texas	In their sphere, as important as any other class of college.	50%
22	Marion College, Virginia	Providing rounded education for students who do not care for 4 year course.	5%

	School	A. What concrete services are the junior colleges rendering their communities?	B. What per cent of pupils continue work in regular colleges?
23	Everett Junior College Washington.	Stimulates greater interest in advanced education. Opportunity for many to get advanced education who could not get away. Keeping the young high school graduate under home influence.	Very high.

	C. What vocational courses do you offer?	D. What effect does the junior college have upon high school schorlarship?	E. Do they justify the increased expenditure of public money for school purposes?
1	Household arts, Drawing, Music and Reading.		Yes
2	Irrigation engineering, Agriculture, Commercial.	Strengthens	Yes--would not advise it in cities of less than $25,000,000 valuation, or where the high school has less than 1000 pupils.
3	None	Noticed none	Yes.
4	Business course	None noticeable	Yes--Money saved to parents. Community benefited by money kept there.
5	Engineering, Liberal Arts, Commerce and Administration, Pre-Medicine and Science.	It stimulates boys to finish high school	Yes.
6	Teacher training	Good	
7	Agriculture, Home economics, Normal training, Manual training.	No noticeable change.	It is questionable if money should be so spent, if it interferes with high standards and enriched courses below college grade.

	C. What vocational courses do you offer?	D. What effect does the junior college have upon high school schorlarship?	E. Do they justify the increased expenditure of public money for school purposes?
8	Expression and Music, Domestic Science, Commercial.	Higher and more complete standard of high school work.	They do.
9	Home economics, Teacher training.		
10	Elementary and High school drawing, Mechanical Drafting.		
11	Secretarial, City Library	No perceptible effect.	Open question as to state support.
12	Phonography and typewriting, Shop (engineering) Drawing	Pupils think more of possibility of going to college. Teachers have more scholarly attitude.	Very certainly do.
13			Yes.
14	Engineering, Drafting, Electricity.	Creates desire to get some place--better scholarship.	Decidedly so--does not exceed that of many small high schools.

	C. What vocational courses do you offer?	D. What effect does the junior college have upon school schorlarship?	E. Do they justify the increased expenditure of public money for school purposes?
15	None	Improves it.	Yes.
16	Teacher training		
17	Secretarial, Librarian, Home Economics, Playground, Normal course in Physical Education, Public School Music and Drawing, Education, Expression, Social Service.	Better scholarship.	Yes--Course adapted to the needs of the student and more individualization is possible.
18	Education, Business, Music, Art, Domestic Science.		
19	Cooking, Sewing, Foundry, Woodworking, Pattern-making.		
20	None	Very beneficial	Yes.
21	None	Great advantage in newly settled country.	The junior college gives the largest return for the amount spent of any kind of college.
22	Domestic Art, Domestic Science.	Tendency is to raise the standard	

	C. What vocational courses do you offer?	D. What effect does the junior college have upon school schorlarship?	E. Do they justify the increased expenditure of public money for school purposes?
23	Commercial, Home Economics.	Excellent.	Yes--expense is not great.

II.

Returns from questionnaires sent to the heads of educational departments of colleges and universities.

	School	A Has the junior college movement met the approval of your department?	B Do you consider it a step toward a more efficient educational system?	C Do they justify the increased expenditure of public money for school purposes?
1	University of Alabama	Yes	Yes	Yes. When state university cannot handle number.
2	Connecticut Agricultural College.	Yes	Yes	In a state of large area.
3	George Washington University	Yes	Yes	Yes
4	Illinois Wesleyan University	Yes	Depends upon future development.	No. State education should be centralized in large units.
5	University of Chicago	Yes	Yes	
6	University of Kansas	Yes. Voted approval in 1917	Yes	Just as the high schools do.
7	Bates College	Yes	Yes. Promotes closer coordination between college and secondary school.	Yes
8	Massachusetts Agricultural College	Yes	Yes	Yes

II. continued-(1)

		A	B	C
9	Harvard University	Yes	Yes	
10	Smith College	Yes	Yes	I believe they do
11	Mount Holyoke College	Yes--if properly graded	Yes--if first class	
12	Clark College	Yes	I do	I think they do
13	College of the Holy Cross	Has not been discussed. Would hardly be approved.	No. Tends to hurry pupils into professional career without general education for life.	Emphatically no. Elementary schools are overcrowded and under-managed.
14	University of Michigan	Yes	Decidedly	Without doubt
15	Michigan Agricultural College	Yes	Yes	Yes
16	Adrian College	No formal approval	Yes	Yes
17	University of Minnesota	Yes	Yes	Yes
18	University of Missouri	Yes	Yes	Yes-if well attended
19	Cornell University	Qualified approval	Yes	Depends on connumity
20	College of the City of New York	Yes-personal approval	Yes	Yes
21	Columbia University Teachers' College	Yes	Yes	Probably

II. continued-(2)

		A	B	C
22	Ohio University	Yes	Yes	Yes, while it costs more, this is due to large numbers "held" in school. This is desirable.
23	Oberlin College	Yes	Yes	
24	University of Pennsylvania	Yes	Yes	Yes
25	Middlebury College	No action	Yes	I believe so

II. Continued.

D		E	F	G
	Do you consider the movement as permanent or as a fad?	What seems to be their influence upon the first two years of the regular college?	What concrete services are they rendering their communities?	How do students coming from the junior college rank with regular juniors of college?
1	Permanent for a period--product of educational evolution.			
2	Permanent	To standardize them	Opening careers for those who might not seek them at a distance. Bridging gaps between high school and college	
3	Permanent			
4	Neither--A long lived stage of development	Little as yet, except increasing the tendency to leave after two years.	Brings college nearer home. Decreasing cost of college education	
5	Permanent		Early college work near home	
6	Permanent because psychologically and administratively sound		Vocational preparation Academic work while at home	
7	Shows symptoms of being permanent		Gives immature H. S. graduate, chance to try out college work without great expense	
8	Permanent			
9	Permanent		More pupils round out secondary education	

II. Continued (1)

	D	E	F	G
10	Permanent--limited to large cities		Furnishes advanced training for many who could not go to college	
11			Allow city residents to begin college, who might not otherwise attend college	
12	Permanent, but still an experiment		Increased number of pupils receiving secondary work.	
13	Fad--believe it to be undemocratic. Gives privileges to the few rather than essentials to majority	Would prevent us from giving the full training of our carefully planned system of general education	Doing harm by distracting public attention from needs of elementary schools	
14	Permanent	Numbers too large to see any influence	Pupils receive higher education who would not	Hold their own
15	Permanent, growth will be slow		Saving time to student. Conserving home influence. Conserving morals	Well
16	Believe it is a logical part of the movement toward the extension of the function of public schools			
17	Permanent	None yet--too few junior colleges		Expect no difference in attainment or ability of students

II. Continued (2)

	D	E	F	G
18	Permanent	Attracts some who would register at state university. Cannot yet see any great influence	Stimulates interest in higher education. Keeps young people at home during formative period. Opening opportunities to many who would not have them.	
19				
20	Permanent	Will displace them		Have heard that they are better prepared
21	Permanent	Practically no influence on state course of study nor numbers entered in regular colleges	Making it possible for many to obtain further education	Indistinguishable
22	Permanent	Increases number of students in these two years. Sends many to continue their advanced courses	Prepare individuals to function better in society	Reports are favorable
23	Natural growth		Brings higher education to larger number.	
24	Permanent	Improves quality of work. Increased attention given to character building	Keeps pupils near home. Individual attention. Adopting courses to needs of community.	
25	Permanent			

Returns from questionnaires sent to high schools.

	High School	A Has the junior college met with your approval?	B What percent of your pupils enter college?	C What percent enter vocational schools?
	Massachusetts			
1	Arlington		26	3
2	Boston Public Latin	No	80 to 90	Negligible
3	Boston English	Yes	32	$\frac{3}{4}$
4	Boston Girls Latin	Appears to be in the right direction	75	10
5	Boston Girls	No	2	
6	Brookline	Depends on community	30 to 50	Negligible
7	Concord	Yes	20	10
8	Everett	Yes	25	6
9	Gloucester	Yes	15	Very small
10	Holyoke	Yes	30	
11	Lexington	Yes	5	
12	Lynn Classical	Yes	75	10
13	Malden		15 to 20	2
14	Melrose	Yes	30	None

		A	B	C
15	Newton	In general have not looked with favor upon it.	58	
16	Salem	Yes, if lower schools are cared for first	30	Very few
17	Somerville	No	5	
18	Springfield	Yes	12 1/2--16 2/3	12 1/2--16 2/3
19	Worcester Classical	Yes	70	Very few
	Connecticut			
20	Bridgeport	Yes	Small	None
21	New Haven	Yes	16 2/3	100 a year from grades
	Maine			
22	Portland	Yes	27	6
	Michigan			
23	Detriot	Yes		
	Minnesota			
24	Minneapolis, Central	Yes	54	
	Minneapolis, East	Yes	50 to 75	few
	Rhode Island			
26	Cranston	We are too near Brown	50% of eligible graduates	None

		A	B	C
	Vermont			
27	Rutland	Yes	2% of total enrollment of all schools	1% of total
28	Burlington	Yes	30 to 45	Very small

	D	E	F	G
	What percent take post graduate work?	What is your opinion of state supported junior colleges in Massachusetts?	Are they needed?	Do they justify the increased expenditure of public money for school purposes?
1	7			
2	None		No	Not in my opinion.
3		Would be useful		~~Yes as development~~ of present high grade high schools
4	2	Favorable, in connection with the larger schools		Same as the state universities qualify
5	1 to 3	No	No	
6	Negligible	We have state supported normal, agriculture and art schools	No	Poor investment
7	5			
8	8	Would increase education for many		Expense beyond high school should be a private matter
9	1	Must come	Yes	Yes
10	Very small	Supported by cities		Yes
11	1	Approval	Yes	Yes
12	2	Favor them	Yes	Yes
13			Have not seen need	
14	8 to 10	Not with opportunities now offered	No	Might

	D	E	F	G
15	5 to 8	Vote against it	No	Not under ordinary conditions in Massachusetts
16	2	Very good idea	Yes	Yes, if lower schools are cared for first
17	¼	No	No	No
18	Less than 10	Larger cities can support their own	If state university is established	I believe they do, though perhaps a large number of pupils do not directly benefit
19	5	Should be city supported		
20	Very few		Yes	Yes
21	Very small	I doubt wisdom of state support		Yes
22	6	Not necessary in small state		Yes, in large state
23				Yes
24	5			Instruction could be carried on at much less expense than at the university
25	5			No increase in state supported system which contains a state university
26	2			Yes, where needed
27	Practically none			Yes
28	Small	Approval		Yes, in cities where there are no colleges

COLLEGE ENROLLMENT

COLLEGE	No. from State	No. out of State	Total	Per cent From State
Amherst	115	272	387	29.72
Boston College	577	16	593	97.30
Boston University	656	136	792	82.83
Clark College	145	39	184	78.80
Harvard University	2,193	3,080	5,273	41.59
Holy Cross College	378	320	698	54.15
Mass. Agricultural College	337	47	384	87.76
Mass. Institute Technology	166	58	224	74.10
Mount Holyoke College	278	596	874	31.81
Radcliffe College	421	135	556	75.72
Simmons College	714	537	1,251	57.07
Smith College	466	1,637	2,103	22.16
Wellesley College	302	1,226	1,528	19.76
Wheaton College	108	95	203	53.20
Williams College	108	449	557	19.38
Worcester Polytechnic Institute	297	128	425	69.88
TOTAL	7,261	8,771	16,032	45.29
Michigan University	6,800	2,057	8,857	76.77
Wisconsin University	4,839	2,139	6,978	69.35

COLLEGE TUITION *

Amherst College	$140.00
Boston College	$100.00
Boston University	$175.00
Clark College	$ 50.00
Harvard University	$200.00
Holy Cross College	$100.00
International Y. M. C. A. College	$140.00
Lowell Textile School	$150.00
Mass. Agricultural College	Free
Mass. Institute of Technology	$250.00
Mount Holyoke College	$175.00
Radcliffe College	$200.00
Simmons College	$150.00
Smith College	$200.00
Wellesley College	$175.00
Wheaton College	$175.00
Williams College	$150.00
Worcester Polytechnic Institute	$150.00
Average	$148.89
Chicago University	$150.00
Michigan University	$ 47.00
Wisconsin University	$ 30.00

* Does not include incidental fees.

Statistics based upon the Report of the Commissioner of Education - 1917

	States	Pupils receiving elementary education.	Pupils receiving secondary education.	Pupils receiving higher education — including normal schools			Population U.S. Census-1916 (estimated.)
				Public	Private	Total	
	North Atlantic Division -						
1	Maine	149,363	17,139	1,908	1,461	3,369	772,489
2	New Hampshire	78,709	10,759	713	1,468	2,181	442,506
3	Vermont	65,295	8,165	789	514	1,303	363,699
4	Massachussetts	633,379	97,571	3,762	22,031	25,793	3,719,156
5	Rhode Island	100,740	11,069	717	1,220	1,937	614,315
6	Connecticut	262,495	25,747	1,203	4,364	5,567	1,244,979
7	New York	1,731,298	183,639	11,744	36,265	48,009	10,273,375
8	New Jersey	535,921	53,648	2,533	3,719	6,252	2,948,017
9	Pennsylvania	1,563,153	125,794	10,807	33,590	44,397	8,522,017
	North Central Division -						
10	Ohio	930,571	99,205	12,584	11,816	24,400	5,150,356
11	Indiana	549,191	58,136	8,021	9,395	17,416	2,816,817
12	Illinois	1,192,194	111,633	15,231	24,530	39,761	6,152,257
13	Michigan	633,753	63,295	14,067	2,675	16,742	3,054,854
14	Wisconsin	482,134	47,390	12,196	2,964	15,160	2,500,350
15	Minnesota	471,892	50,798	9,077	3,562	12,639	2,279,603
16	Iowa	511,648	60,591	7,087	6,151	13,238	2,220,321
17	Missouri	733,670	56,567	9,708	6,413	16,121	3,410,692
18	North Dakota	145,427	10,769	2,042	318	2,360	739,201
19	South Dakota	128,212	11,103	2,463	684	3,147	698,509
20	Nebraska	273,219	33,034	5,893	2,132	8,025	1,271,375
21	Kansas	376,331	45,738	10,543	2,990	13,533	1,829,545
	South Atlantic Division						
22	Delaware	47,403	2,924	266	0	266	213,380
23	Maryland	258,800	15,631	2,203	4,200	6,403	1,362,807
24	District of Columbia	55,579	9,553	1,332	4,756	6,088	363,980
25	Virginia	477,491	28,385	3,354	3,663	7,017	2,192,019
26	West Virginia	305,092	15,570	1,934	642	2,576	1,386,038
27	North Carolina	654,188	21,230	3,353	3,200	6,553	2,402,738
28	South Carolina	415,599	10,972	2,833	1,841	4,674	1,625,475
29	Georgia	657,008	22,077	3,135	2,889	6,024	2,856,065
30	Florida	199,794	7,600	626	693	1,319	893,493
	South Central Division						
31	Kentucky	550,295	21,210	4,289	2,611	6,900	2,379,639
32	Tennessee	613,494	27,259	3,529	5,307	8,836	2,288,004
33	Alabama	513,306	19,529	4,394	940	5,334	2,332,608
34	Mississippi	486,840	13,953	3,557	765	4,322	1,951,674
35	Louisiana	346,217	14,598	2,492	1,690	4,182	1,829,130
36	Texas	992,854	53,504	7,670	3,468	11,138	4,429,566
37	Arkansas	440,820	13,741	1,216	732	1,948	1,739,723
38	Oklahoma	511,037	23,963	4,685	205	4,890	2,202,081

	Pupils receiving higher education - excluding normal schools.			Percent of population in institutions.				Graduates in high school class
	Public	Private	Total	Elementary	Secondary	Higher (Normal)	Higher	
1	1,138	1,461	2,599	19.34	2.22	.44	.34	974
2	452	1,468	1,920	17.78	2.43	.49	.43	454
3	585	514	1,109	17.13	2.24	.35	.30	397
4	643	21,207	21,850	17.03	2.62	.69	.59	4,668
5	282	1,220	1,502	16.40	1.80	.31	.24	397
6	321	4,187	4,508	21.09	2.07	.45	.36	1,217
7	6,004	36,178	42,182	16.85	1.78	.47	.41	4,274
8	0	3,719	3,719	18.18	1.82	.21	.12	2,329
9	2,174	33,362	35,536	18.34	1.47	.52	.41	6,694
10	11,120	11,678	22,798	18.07	1.92	.47	.44	6,154
11	4,780	6,044	10,824	19.49	2.05	.62	.38	3,773
12	5,790	23,929	29,719	19.38	1.81	.64	.48	5,418
13	8,242	2,558	10,800	20.74	2.07	.54	.35	3,314
14	5,239	2,911	8,150	19.28	1.89	.61	.32	2,743
15	5,155	3,515	8,670	20.70	2.23	.55	.38	2,428
16	6,953	5,841	12,794	23.04	2.73	.59	.57	3,089
17	4,083	6,363	10,446	21.51	1.66	.47	.31	2,752
18	1,105	318	1,423	19.67	1.45	.32	.19	464
19	876	484	1,360	18.35	1.59	.45	.19	578
20	3,727	2,132	5,859	21.41	2.59	.63	.46	1,945
21	4,671	2,990	7,661	20.56	2.50	.73	.42	2,320
22	266	0	266	22.21	1.37	.12	.12	143
23	1,487	4,170	5,657	19.72	1.14	.47	.41	554
24	1,016	4,756	5,772	15.27	2.62	1.66	1.57	385
25	2,074	3,641	5,715	21.33	1.29	.32	.26	942
26	917	632	1,549	22.01	1.12	.18	.11	658
27	1,618	3,059	4,677	27.22	.89	.27	.19	595
28	1,687	1,841	3,528	25.56	.68	.28	.22	517
29	1,588	2,889	4,477	23.00	.77	.21	.15	890
30	626	368	994	22.36	.85	.14	.11	284
31	1,026	2,601	3,627	22.13	.88	.29	.25	793
32	1,009	5,181	6,190	26.81	1.19	.38	.27	725
33	1,531	940	2,471	22.01	.83	.23	.11	701
34	2,223	765	2,988	24.94	.71	.22	.15	587
35	797	1,690	2,487	18.93	.79	.23	.13	379
36	4,366	3,468	7,834	22.41	1.21	.25	.18	2,181
37	850	709	1,559	25.34	.79	.11	.09	586
38	2,284	205	2,489	23.21	1.09	.22	.11	863

	Students in graduating class preparing for higher institutions.	Percent of graduates preparing for higher institutions.	Percent of high school enrollment in higher institutions.		Students in Colleges, Universities and Technological Schools			
			Including normal schools	Excluding normal schools	Public	Private	Total	Percent in Public Schools
1	572	58.73	19.67	15.16	1,015	1,365	2,380	42.65
2	165	36.34	20.27	17.84	452	1,435	1,887	23.95
3	157	39.55	15.94	13.59	599	514	1,113	53.81
4	2,085	44.66	26.43	22.39	643	16,644	17,287	3.72
5	154	38.79	17.49	13.56	292	1,140	1,432	20.39
6	503	41.33	21.62	17.52	221	3,741	3,962	5.63
7	3,666	58.43	26.14	22.97	5,810	26,316	32,126	18.09
8	1,737	74.58	11.65	6.93	0	2,876	2,876	0.
9	3,376	50.73	35.29	28.25	2,174	16,862	19,036	11.42
10	1,892	30.74	24.59	22.98	10,393	8,982	19,375	53.65
11	1,396	37.00	22.75	18.62	4,422	4,597	9,019	39.05
12	1,385	25.56	35.61	26.62	5,144	15,240	20,384	25.24
13	1,412	42.66	26.45	17.06	6,750	1,740	8,490	79.50
14	1,432	52.20	31.99	17.19	4,874	2,161	7,035	69.28
15	1,110	45.71	24.88	17.06	4,240	2,232	6,472	65.51
16	743	24.05	21.84	21.11	6,140	5,438	11,578	53.03
17	1,234	44.84	28.50	18.46	3,867	2,858	6,725	57.50
18	240	51.72	21.91	13.21	952	318	1,270	74.96
19	215	37.19	28.34	12.25	740	484	1,224	60.46
20	760	39.05	24.29	17.73	3,358	1,415	5,773	58.16
21	709	30.56	29.58	10.19	4,222	2,812	7,034	60.02
22	51	35.66	9.09	9.09	266	0	266	100.00
23	327	59.02	40.96	36.12	1,487	1,936	3,423	43.44
24	166	43.12	62.68	60.42	593	2,060	2,653	22.35
25	429	45.54	24.72	20.13	1,706	2,672	4,378	38.96
26	258	39.21	16.54	9.93	822	552	1,374	61.28
27	170	28.57	30.86	22.03	1,345	2,767	4,112	32.71
28	95	18.37	42.60	32.15	1,527	1,777	3,304	46.21
29	228	25.62	27.28	20.27	1,422	1,678	3,100	54.13
30	86	30.27	17.35	13.08	557	298	855	65.14
31	319	40.22	32.53	12.38	889	1,276	2,165	41.06
32	291	40.27	32.26	22.71	712	3,607	4,319	16.48
	215	30.67	27.31	12.65	1,230	844	2,074	59.30
34	123	20.95	30.90	21.41	2,035	745	2,780	73.20
35	208	54.88	28.64	17.03	731	1,037	1,768	37.34
36	731	33.51	20.81	14.64	3,701	2,685	6,386	58.11
37	205	34.98	14.17	11.34	759	636	1,395	54.41
38	289	33.25	20.41	10.38	1,981	205	2,186	90.62

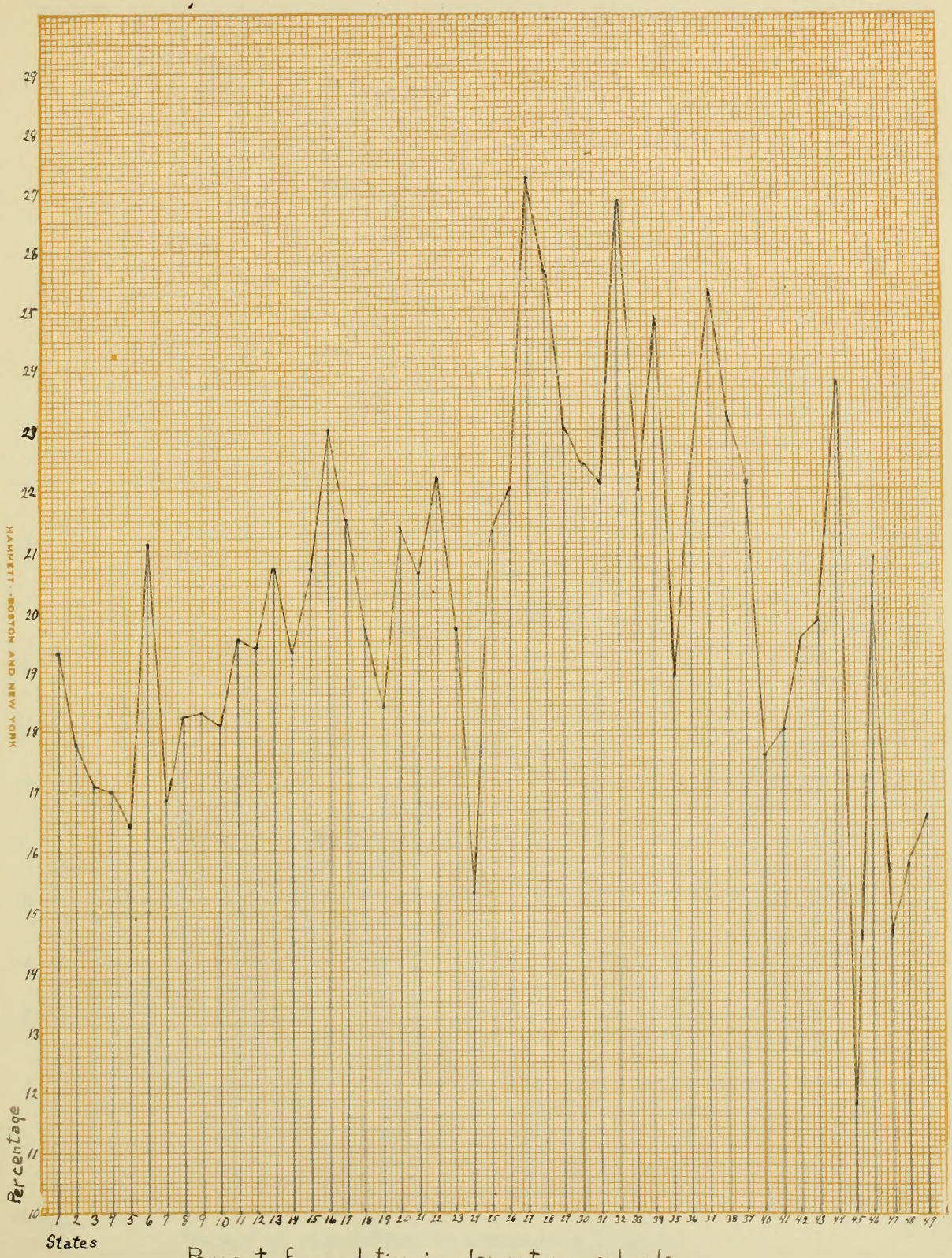
	States	Pupils receiving elementary education.	Pupils receiving secondary education.	Pupils receiving higher education — including normal schools			Population U.S. Census - 1916 (estimated)
				Public	Private	Total	
	Western Division						
39	Montana	101,611	8,417	1,012	0	1,012	459,494
40	Wyoming	31,667	2,606	209	0	209	179,559
41	Colorado	173,405	19,098	3,007	1,774	4,781	962,060
42	New Mexico	79,930	3,152	497	0	497	410,283
43	Arizona	51,046	3,549	831	0	831	255,544
44	Utah	103,317	12,162	1,506	0	1,506	434,083
45	Nevada	12,626	1,041	441	0	441	106,734
46	Idaho	88,427	9,918	1,001	89	1,090	428,586
47	Washington	224,113	31,919	6,718	639	7,357	1,534,221
48	Oregon	132,057	18,965	2,973	1,340	4,313	833,741
49	California	488,090	86,527	12,136	8,066	20,202	2,938,654

Pupils receiving elementary education C

C

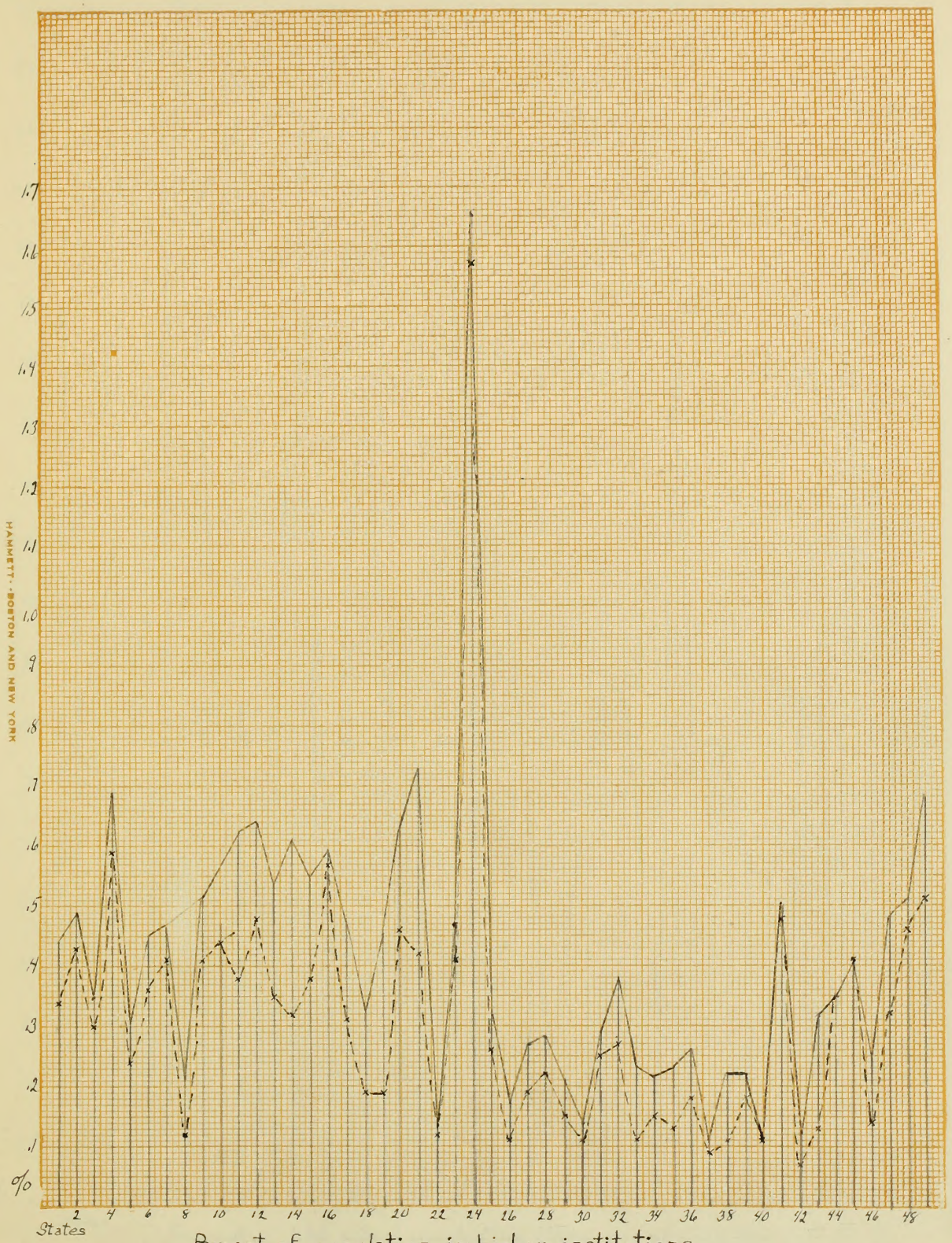
	Pupils receiving higher education - excluding normal schools.			Percent of population in institutions.				Graduates in high school class
	Public	Private	Total	Elementary	Secondary	Higher (Normal)	Higher	
39	855	0	855	22.11	1.83	.22	.18	342
40	209	0	209	17.63	1.45	.11	.11	117
41	2,863	1,774	4,637	18.02	1.99	.50	.48	957
42	284	0	284	19.48	.77	.12	.07	136
43	353	0	353	19.97	1.39	.32	.13	141
44	1,506	0	1,506	23.80	2.80	.35	.35	364
45	441	0	441	11.83	.97	.41	.41	40
46	512	89	601	20.61	2.31	.25	.14	425
47	4,306	639	4,945	14.61	2.08	.48	.32	1,665
48	2,539	1,340	3,879	15.80	2.27	.51	.46	950
49	7,084	7,978	15,062	16.61	2.94	.68	.51	3,606

	Students in graduating class preparing for higher institutions	Percent of graduates preparing for higher institutions	Percent of high school enrollment in higher institutions		Students in Colleges, Universities and Technological Schools			
			Including normal schools	Excluding normal schools	Public	Private	Total	Percent in Public Schools
39	64	28.71	12.03	10.16	730	0	730	100.00
40	33	28.20	8.02	8.02	209	0	209	100.00
41	185	19.33	24.39	24.12	2,633	1,481	4,114	64.00
42	51	37.50	15.76	9.01	284	0	284	100.00
43	56	39.71	23.41	9.94	353	0	353	100.00
44	44	12.09	12.38	12.38	1,391	0	1,391	100.00
45	30	75.00	42.36	42.36	441	0	441	100.00
46	221	52.00	10.99	6.06	463	89	552	83.87
47	615	36.93	23.04	15.49	3,981	597	4,578	86.96
48	282	29.68	22.71	20.45	2,356	775	3,131	75.24
49	1,568	43.48	23.34	17.40	6,415	5384	11,799	54.37

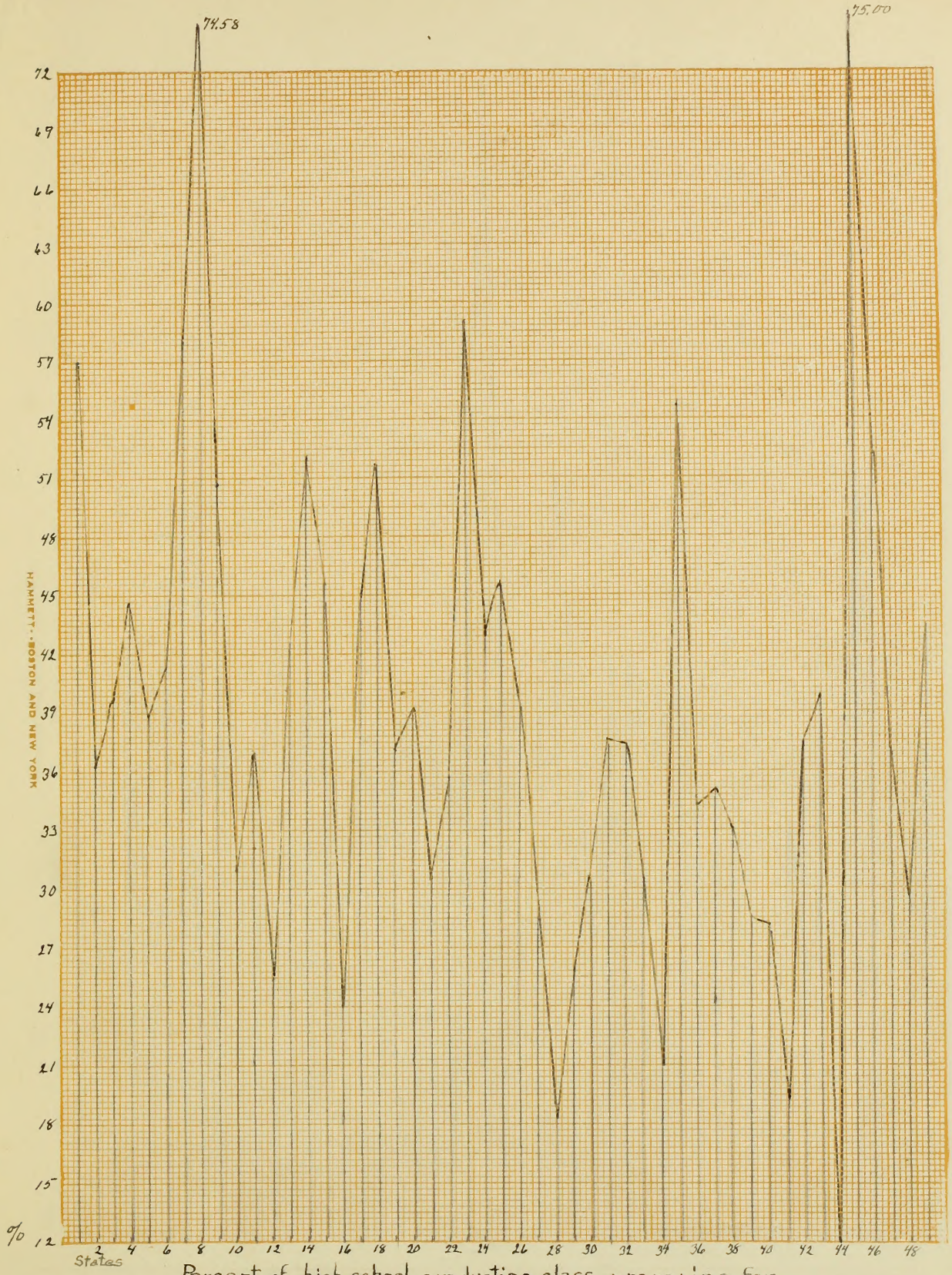


Percent of population in elementary schools.

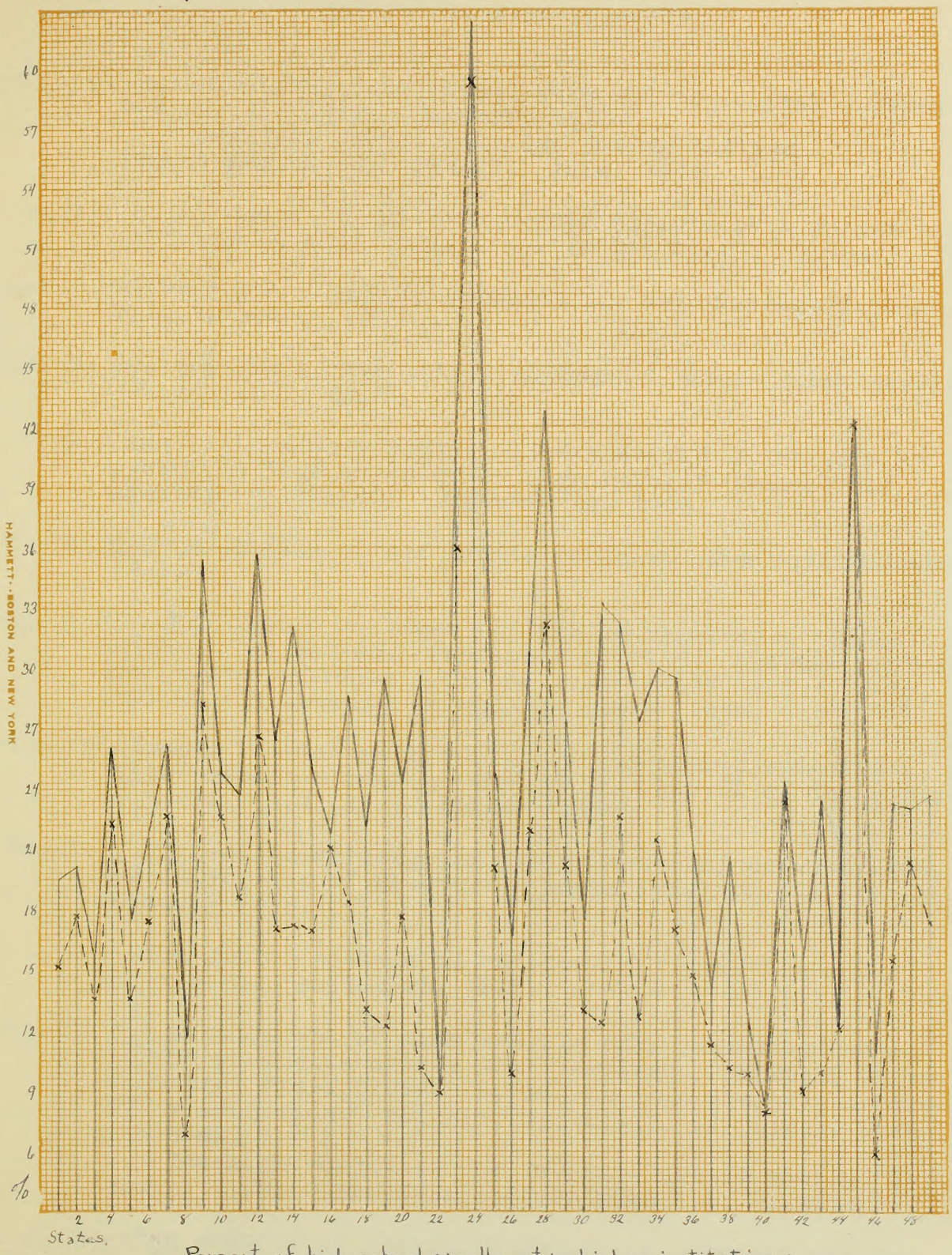
Percent of population in secondary schools.



Percent of population in higher institutions,
including normal schools, ———
excluding normal schools. -x- - - -x-



Percent of high school graduating class preparing for higher institutions.



Percent of high school enrollment in higher institutions,
including normal schools ———
excluding normal schools -x- - - x-

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